

NEVADA DIVISION OF ENVIRONMENTAL PROTECTION

FACT SHEET

(pursuant to NAC 445A.236)

Applicant: Merriwether's Pit Stop Pots and Septic Service
Bill and Sherri Merriwether
P.O. Box 114
Yerington, Nevada 89447

Permit: NEV2002516

Location: Moreda Dairy
12 Peeples Lane
Yerington, Lyon County, Nevada 89447
Latitude: 39° 57' 09" N
Longitude: 119° 48' 26" W
Township 15 N, Range 25 E, Section 31 MDB&M

General: The Applicant proposes to land apply domestic septage and grease trap material to 40 acres of nutrient deficient agricultural land at the Moreda Dairy, approximately 5 miles southwest of Wabuska, Lyon County, Nevada. The site is privately owned rangeland currently used for grazing and is bordered by public lands managed by the Bureau of Land Management or other Moreda Dairy property. The 40 acres will be subdivided into smaller fields with only the area expected to be used for land application within one year cleared.

The septage must be screened to remove solids over ½-inch in size before the septage can be land applied. The septage must be incorporated into the soil within 6 hours of being land applied. A crop must be planted to uptake the nitrogen that is contained in the septage within one year of domestic septage application. The application rate of domestic septage will be based on the nitrogen needs of the crop planted. Currently, the Applicant is planning to plant rye. The fields will be irrigated once, shortly after planting.

The Applicant is planning to install an above ground storage tank, maximum size 10,000 gallons, at the land application site to store the domestic septage during inclement weather and when the incorporation equipment is not operational or at the land application site. The domestic septage will be screened upon entering the tank. The tank must not be open to the atmosphere other than venting.

Receiving Water Characteristics: The groundwater is reported to be at a depth of approximately 20 feet below ground surface in a 24-foot deep stock well located 150 feet south of the land application site. This well is no longer in use and the water from this well has not been analyzed.

According to the Permittee, the next nearest well is an irrigation well approximately one mile from the site. The only Section 31 well in the Division of Water Resources database is a 97-foot deep stock well with a static water level of 7.8 feet. In 1999, three irrigation wells were installed or expanded in section 32. These wells were constructed to depths in excess of 400 feet and had static water levels of 2, 2, and 7 feet at the time of construction.

Groundwater monitoring is not usually required for domestic septage land application sites.

Characteristics: Only domestic septage and grease trap material may be land applied. No analysis of the domestic septage or the grease trap material is required. Grease trap material shall be mixed with domestic septage at a rate of one part grease trap material to a minimum of three parts domestic septage, by volume, before it is land applied.

No industrial waste may be land applied.

Flow: The application rate, in gallons of septage per acre per year, shall be based on the amount of nitrogen required by the planned crop and yield. If the crop is rye, as proposed, with an annual nitrogen demand of approximately 130 pounds per acre, domestic septage may be applied at a maximum rate of 50,000 gallons per acre per year.

$$\text{gallons/acre} = \text{pounds of nitrogen required for crop yield} \div 0.0026$$

The Permittee has estimated a 30-day average flow of 1,000 gallons per day (gpd) and a maximum flow of 1,500 gpd in the permit application. A nitrogen requirement of 130 pounds per acre and a 30-day average flow of 1,000 gpd would require approximately 7.5 acres per year for land application. The 130 pounds of nitrogen per acre is a conservative value and may be adjusted based on the recommendation of the Cooperative Extension Service or other cropping expert with local experience regarding crop nitrogen demand and yields.

Permits for the land application of domestic septage do not include flow limitations, provided that adequate land is available for domestic septage application.

Proposed Septage Use Requirements:

-Septage use must meet all of the requirements of 40CFR section 503, Standards for the Use or Disposal of Sewage Sludge.

-Domestic septage and grease trap material shall not be applied to land within 100 feet of any public roadway or within 600 feet of any residence.

-Domestic septage and grease trap material shall not be applied within 200 feet of a drinking water well not defined as a public water system.

-Domestic septage and grease trap material shall not be applied within 1,000 feet of a public water system well.

-Domestic septage and grease trap material shall not be applied within 50 feet of any irrigation or drainage ditch, swale, intermittent stream, creek, river, wetland, lake, or other surface water.

-All land application sites shall be fenced and posted with warning signs stating "DOMESTIC SEPTAGE APPLIED, NO TRESSPASSING".

-Equipment to incorporate the domestic septage and grease trap material into the soil shall be on the site and in operating condition before septage is land applied.

-Food crops shall not be grown on land that has had domestic septage applied within the past five (5) years. (Food crops are crops consumed by humans. These include, but are not limited to, fruit, vegetables, and tobacco.)

-The domestic septage and grease trap material shall be land applied at a uniform rate by means of a spray bar, splash plate, or similar method approved by the Division.

-The domestic septage and grease trap material shall be screened through a ½-inch or finer screen to remove solids from the septage and grease trap material prior to land application. Solid material removed from the domestic septage and grease trap material shall be disposed of in an approved landfill.

-Grease trap material shall be mixed with domestic septage at a rate of one part grease trap material to at least three parts domestic septage, by volume, before it is land applied.

-Domestic septage shall not be applied to land if the depth to groundwater is less than 3 feet.

Schedule of Compliance: The Permittee shall implement and comply with the provisions of the schedule of compliance after approval by the Administrator, including in said implementation and compliance, any additions or modifications which the Administrator may make in approving the schedule of compliance. The Permittee shall implement and/or execute the following scheduled compliance requirements:

- a. Upon the effective date of this permit, the Permittee shall achieve compliance with the reuse limitations.
- b. The Permittee shall submit reports illustrating compliance or noncompliance with specified compliance dates within 14 days of any respective, scheduled compliance date to the Compliance Coordinator, Bureau of Water Pollution Control.

- c. Prior to land applying any domestic septage or grease trap material, the Permittee shall have a representative sample of the adjacent stock water well analyzed for chlorides, fecal coliform, nitrate as nitrogen, and total dissolved solids.
- d. Prior to land applying any domestic septage or grease trap material, the Permittee shall submit to the Division documentation that the Moreda Dairy has been provided a copy of the permit.
- e. Within sixty (60) days of the permit effective date, the Permittee shall submit an Operations and Maintenance (O&M) Manual covering the use of the domestic septage and grease trap material to the Division for review and approval.
- f. Ten (10) days prior to the proposed use of the domestic septage storage tank, the Permittee shall submit to the Division notification of the tank's installation and confirmation of the tank's volume. (10,000 gallons maximum)
- g. Within forty-five (45) days of measuring the depth to water in the stock water well at ten feet or less from the surface, the Permittee shall submit to the Division a proposal to determine the depth to groundwater at the land application site. The proposal shall include a monitoring plan to ensure compliance with the requirement that domestic septage not be applied if the depth to groundwater is less than three (3) feet.

Rationale for Permit Requirements: Permit requirements are necessary to protect the public health and prevent the land application site from becoming a public nuisance and a source of groundwater pollution.

Due to the shallow groundwater in the northern end of Mason Valley and the lack of any water quality data in the permit application, the Permittee is be required to characterize the stock well water prior to land application of domestic septage.

Due to the shallow groundwater in the northern end of Mason Valley, the Permittee will be required to monitor the depth to groundwater in the stock water well every six months. If the water in the stock water well rises to within ten feet of the surface, the depth to groundwater at the land application site must be accurately determined to ensure compliance with the depth to groundwater restriction.

Proposed Determination: The Division has made the tentative determination to issue the proposed permit for a five (5) year period.

Procedures for Public Comment: The Notice of the Division's intent to issue a permit, NEV2002516, authorizing the facility to discharge to the groundwater of the State of Nevada subject to the conditions contained within the permit, is being sent to the **Mason Valley News** and the **Reno Gazette-Journal** for publication. The notice is being mailed to interested persons on our mailing list. Anyone wishing to comment on the proposed permit can do so in writing for a period of 30 days following the date of publication of the public notice in the newspaper. The date and time by which all written comment must be postmarked or transmitted to the Division via facsimile or e-mail is 5:00 P.M. December 22, 2002. The comment period can be extended at the discretion of the Administrator.

A public hearing on the proposed determination can be requested by the applicant, any affected State, any affected interstate agency, the Regional Administrator of EPA Region IX or any interested agency, person or group of persons. The request must be filed within the comment period and must indicate the interest of the person filing the request and the reasons why a hearing is warranted. Any public hearing determined by the Administrator to be held must be conducted in the geographical area of the proposed discharge or any other area the Administrator determines to be appropriate. All public hearings must be conducted in accordance with NAC 445A.238.

The final determination of the Administrator may be appealed to the State Environmental Commission pursuant to NRS 445A.605.